PATENT COOPERATION TREAT

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 32741P WO	FOR FURTHER	FOR FURTHER ACTION See Form PCT/IPEA/416				
International application No. PCT/EP2005/004047	International filing d 15.04.2005	ate (day/month/year)	Priority date (day/month/year) 16.04.2004			
International Patent Classification (IPC) or national classification and IPC INV. A61K38/05 A61P25/06 A61K31/16 A61K31/165						
Applicant SCHWARZ PHARMA AG						
1. This report is the interna Authority under Article 3	tional preliminary examination 5 and transmitted to the appli	n report, established by t cant according to Article	his International Preliminary Examining 36.			
2. This REPORT consists of	of a total of 6 sheets, includin	g this cover sheet.				
3. This report is also accon	npanied by ANNEXES, comp	rising:				
a. 🗆 sent to the applic	ant and to the International B	ureau) a total of sheets,	as follows:			
☐ sheets of the and/or sheets						
beyond the d	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
sequence listing a	national Bureau only) a total of and/or tables related thereto, I ence Listing (see Section 802	n electronic form only, as	per of electronic carrier(s)) , containing a sindicated in the Supplemental Box tructions).			
4. This report contains indic	cations relating to the following	g items:				
⊠ Box No. I Basis of the second se	of the report					
☐ Box No. II Priority						
☐ Box No. III Non-es	tablishment of opinion with re	gard to novelty, inventive	e step and industrial applicability			
[]	unity of invention					
	ned statement under Article 39 bility; citations and explanation	5(2) with regard to novelt ons supporting such state	y, inventive step or industrial ment			
	documents cited					
Box No. VII Certain defects in the international application						
☐ Box No. VIII Certain observations on the international application						
Date of submission of the demand		Date of completion of this report				
16.02.2006		13.09.2006	13.09.2006			
Name and mailing address of the international		Authorized officer				
European Patent Office - P.B. 5818 Patentiaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo ni Fax: +31 70 340 - 3016		Langer, Oliver Telephone No. +31 70 :	340-1972			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2005/004047

	Box No. I	Basis of the report			
1.	. With regard to the language, this report is based on				
	★ The international application in the language in which it was filed				
	a translation of the international application into, which is the language of a translation furnished for the purposes of: international search (under Rules 12.3(a) and 23.1(b)) publication of the international application (under Rule 12.4(a)) international preliminary examination (under Rules 55.2(a) and/or 55.3(a))				
2.	2. With regard to the elements* of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):				
	Description	ı, Pages			
	1-36	as originally filed			
	Claims, Nu	mbers			
	1-38	as originally filed			
	Drawings, \$	Sheete			
		as originally filed			
		ence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing			
3.		nendments have resulted in the cancellation of:			
	☐ the ☐ the ☐ the	description, pages claims, Nos. drawings, sheets/figs sequence listing (specify): table(s) related to sequence listing (specify):			
4.	This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).				
	☐ the ☐ the ☐ the	description, pages claims, Nos. drawings, sheets/figs sequence listing (specify): table(s) related to sequence listing (specify):			
		em 4 applies, some or all of these sheets may be marked "superseded."			

INTERNATIONAL PRELIMINARY REPORT **ON PATENTABILITY**

International application No. PCT/EP2005/004047

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Box No. V

1. Statement

Novelty (N)

Yes: Claims

33,34,37,38

No: Claims

1-32,35,36

Inventive step (IS)

Yes: Claims

No: Claims

Claims

1-38

Industrial applicability (IA)

Yes: Claims

No:

1-38

2. Citations and explanations (Rule 70.7):

see separate sheet

PCT/EP2005/004047

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

V.1. Reference is made to the following document:

D1: WO 02/15922 A (RESEARCH CORPORATION TECHNOLOGIES, INC) 28. February 2002 (2002-02-28)

V.2. Novelty (Article 33(2) PCT)

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-32, 35 and 36 is not new in the sense of Article 33(2) PCT.

The document D1 (WO-A-02/15922)

...discloses the use of compounds according to formula (lb) for the treatment of migraine headaches (abstract).

The explicitly mentioned compounds of claims 14 and 24 of the application are also specifically claimed in document D1 (claims 15 and 34). Concerning the selection of enantiomers, the "D stereoisomer is preferred" in document D1 (page 31, line 6). See also the other passages cited in the search report.

The knowledge of CSD involvement in the development of migraine is not limiting the claims which are clearly directed to the treatment of migraine, see, e.g., page 1, paragraph 1; page 4, last paragraph to page 5, fist paragraph; page 8, lines 30 and 31; page 11, last paragraph. This applies regardless of the mechanism involved in migraine development.

The document D1 is clearly relating to the treatment of migraine and therefore relevant for novelty.

The disclosure of document D1 is novelty-destroying for the subject-matter of claims 1-32, 35 and 36.

V.3. Inventive Step (Article 33(3) PCT)

V.3.1. Claims 33, 34, 37 and 38

- **V.3.1.1.** The claims 33 and 34 relate to the <u>use of the compounds</u> of the application in combination with "a further active agent for the prevention, alleviation or/and treatment of headache or/and CSD-associated disorders" (claim 33).
- **V.3.1.2.** The claims 37 and 38 relate to <u>pharmaceutical compositions</u> comprising a compound of the application in combination with "a further active agent for the prevention, alleviation or/and treatment of headache or/and CSD-associated disorders" (claim 37).
- V.3.1.3. Analysis of inventive step for the combination of pharmaceutically active compounds:

The act of combining two active compounds A and B for <u>use in the treatment</u> of a disease X is not considered to involve an inventive step if both A and B are already separately known to be effective in the treatment of X, unless an unexpected effect is obtained by combining A and B.

Knowing about the properties of A and B, the skilled person would expect at least some effect in the treatment of X when A and B are combined, unless indications to the contrary are available from the prior art.

Likewise, for a claim to the combination of A and B as a <u>pharmaceutical combination</u>, if A and B are already separately known for their use in therapy, the combination is not inventive.

Therefore, any claims to combinations of compounds for which no unexpected effect has been demonstrated in the application cannot be considered to involve an inventive step.

- **V.3.1.4.** The claimed pharmaceutical activity of the compounds of the application (A) are known from D1. The second component (B) is defined by its applicability in the claimed therapeutic application (X).
- V.3.1.5. The subject-matter of present claims 33, 34, 37 and 38 consequently lacks the

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/EP2005/004047

presence of an inventive step in the sense of Article 33(3) PCT in view of the disclosure of document D1.

V.3.2. Claims 1-32, 35 and 36

The claims 1-32, 35 and 36 are not novel in view of the disclosure of document D1, see section V.2.

These claims consequently also lack an inventive step since they are obvious in view of the document D1 as closest prior art.

V.3.3. The subject-matter of present claims 1-38 lacks an inventive step in the sense of Article 33(3) PCT.

V.4. Industrial applicability (Article 33(4) PCT)

Present claims 1-38 relate to the provision of pharmaceutical compositions and to the second or further medical use of peptidic compounds and meet the requirements of Article 33(4) PCT.